S/081/61/000/022/076/092
[illegible]/B105

The Solubility of Oil Hydrocarbons in Organic Solvents and Ways of the Oil Production Improvement

[illegible] from sulfurous paraffin-base petroleum by phenol containing 10% water makes it possible to obtain an oil resistant to oxidation and having high susceptibility to antioxidant admixtures. The two-stage deparaffination of wide oil fractions makes it possible to increase the output of oils. An increase of the output of deparaffinized oils and the filtration rate is also attained by the addition of admixtures, in particular, of the depressant АзНИИ (AzNII) and oxidized petrolatum.

V. E.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/3

RYABIKOV, N., instruktor-krupchatnik.; SHCHEGROVA, L., inzhener.

They have learned how to operate roller mills at high speed. Muk.-elev.prom. 23 no.4:19-21 Ap '57. (MLRA 10:5)

1. Kurskiy trest Rosglavmuki (for Ryabikov). 2. Orlovskaya mel'nitsa Rosglavmuki (for Shchegrova).
(Grain-milling machinery)

CHERNOZHUKOV, N.I.; KAZAKOVA, L.P.; SHCHEGROVA, K.A.

Method of chromatographic fractionation of naphthenic and aromatic hydrocarbons of oil fractions of petroleum. Izv. vys. ucheb. zav.; neft' i gaz 3 no.5:93-100 '60. (MIRA 15:6)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni akademika I.M. Gubkina.
(Hydrocarbons)

KAZAKOVA, L.P.; LAZAREVA, I.S.; SHCHEGROVA, K.A.; FAL'KOVICH, M.I.

Studying solid hydrocarbons of the petroleums of Kuybyshev Province. Izv. vys. ucheb. zav.; neft' i gaz 6 no.2:56-62 '63. (MIRA 16:5)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni akademika I.M.Gubkina.

(Kuybyshev Province--Hydrocarbons)

CHERNOZHUKOV, N.I.; SHCHEGROVA, K.A.

Separation of sulfur compounds from aromatic hydrocarbons by means of adsorption. Izv. vys. ucheb. zav.; neft' i gaz 5 no.1:51-56 '62. (MIRA 16:11)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni akademika I.M. Gubkina.

SHCHEGROVA, M.I.; KOBLYANSKIY, A.G.

Removing chlorides from glucose solutions by electrolysis using the ion exchanger membranes. Izv.vys.ucheb.zav.; pishch. tekh. no.6:49-54 '61. (MIRA 15:2)

1. Krasnodarskiy institut pishchevoy promyshlennosti, kafedra neorganicheskoy i analiticheskoy khimii.

(Glucose)(Ion exchange)(Electrolysis)

SHCHEGROVA, M.I.; TSYBUL'SKAYA, T.A.; YANOVA, L.I.

Effect of some colloids on the performance of ion exchange membranes. Izv. vys. ucheb. zav.; pishch. tekh. no.6:37-39 '63. (MIRA 17:3)

1. Krasnodarskiy politekhnicheskiy institut, kafedra neorganicheskoy i analiticheskoy khimii.

SHCHEKA, I.A.

Second Ukrainian National Conference on inorganic chemistry.
Zhur.neorg.khim. 1 no.5:1123-1125 My '56. (MLRA 9:10)

(Ukraine--Chemistry, Inorganic)

DELIMARSKIY, Yuriy Konstantinovich [Delimars'kyi, IU.K.]; ZAYATS, Anastasiya Ignat'yevna [Zaiets', A.I.]; SHCHEKA, I.A., doktor khim.nauk, otv.red.; POKROVSKAYA, Z.S. [Pokrovs'ka, Z.S.], red.izd-va; KUZ', V.P., tekhred.

[Development of electrochemistry in the Ukraine] Rozvytok elektrokhimii na Ukraini. Kyiv, Vyd-vo Akad.nauk URSR, 1957. 46 p. (MIRA 12:5)

(Ukraine--Electrochemistry)

KORENBAUM, S.A.; SHCHEKA, S.A.

Some characteristics of the distribution of magnesium-silicate deposits in the Maritime Territory. Zakonom. razm. polezn. iskop. 6:92-107 '62. (MIRA 16:6)

1. Geologicheskiy institut Dal'nevostochnogo filiala Sibirskogo otdeleniya AN SSSR.
(Maritime Territory—Magnesium silicates)

[illegible] [illegible], L. I. Izucheniye biologii sornyakov i mer bor'by s nimi. V sb.: Nauch. otchet [illegible] selekts.-opyt. Stantsii po agrotekhnike [illegible] za 1935-1947 gg. (Kuybyshev), 1949, s. 161-66.

SO: Letopis, No. 3?, 194?.

SHCHEKKACHEV, V. N.

22469. Shchekkachev, V. N. Proyavleniya uprugogo rezhima pri eksploatatsii skvazhin trudy mosk. neft. in-ta im. akad. gubkina, vyp. 9, 1949, s. 3-36.

SO: LEPOTIS' No. 30, 1949

DERRENT, Alan [Durrant, Allan] (Angliya); SHCHEKALDIN, A.N. [translator]

Hereditary differentiation in flax. Agrobiologiia no.6:824-830 N-D '60. (MIRA 13:12)

1. Otdel sel'skokhozyaystvennoy botaniki. Universitetskiy kolledzh v Uel'se, Aberistuit.

(Flax breeding)

SHCHEKALEV, V.S., tekhnik

Certain problems concerning the manufacture and equipment of 6 to
10 kv. power distribution devices. Energetik 9 no.12:12-13 D
'61. (MIRA 15:1)
(Electric power distribution--Equipment and supplies)

PASTUKHOV, A.I., kand.tekhn.nauk; SMIRNOV, L.A., inzh.; DZEMYAN, S.K., inzh.; SHCHEKALEV, Yu.S., inzh.; TIMONINA, V.M., tekhnik

New developments in research. Stal' 24 no.7:614 Jl '64.
(MIRA 18:1)

ARNAUTOV, V.T.; BARANOV, V.M.; IONSKOY, S.A.; PASTUKHOV, A.I.; SMIRNOV, L.A.; TORSHILOV, Yu.V.; TRET'YAKOV, M.A.; UDOVENKO, V.G.; FREYDENZON, Ye.Z.; SHCHEKALEV, Yu.S.; Prinimali uchastiye: MAKAYEV, S.V.; KOMPANIYETS, G.M.; NAGOVITSYN, D.F.; NOVOLODSKIY, P.I.; VARSHAVSKIY, V.L.; KOROGODSKIY, V.G.; KLIBANOV, Ye.L.: MEDVEDEVSKIKH, Yu.; TALANTSEVA, T.I.; DUBROV, N.F.; DZEMYAN, S.K.; TOPYCHKANOV, B.I.; CHARUSHNIKOV, G.A.; KHARITONOV, Yu.A.

Developing and mastering the technology of converting vanadium cast iron in oxygen-blown converters with a 100 ton (Mg) capacity. Stal' 25 no.6:507-508 Je '65. (MIRA 18:6)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat (for Makayev, Kompaniyets, Nagovitsyn, Novolodskiy, Varshavskiy, Korogodskiy, Klibanov, Medvedevskikh, Talantseva). 2. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov (for Dubrov, Dzemyan, Topychkanov, Charushnikov, Kharitonov).

MOROZOV, D.I., kand.tekhn.nauk; SHCHEKALKIN, V.M., inzh.

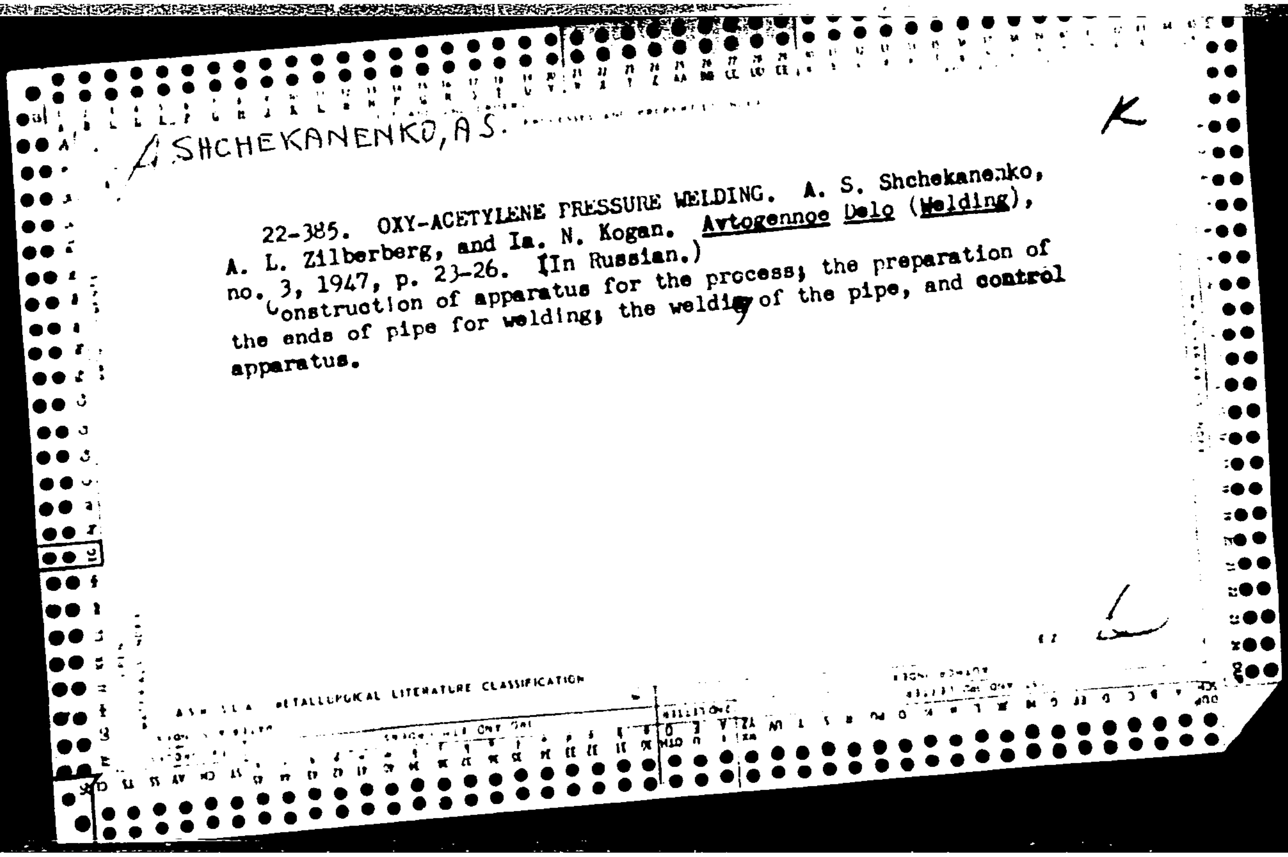
Results of the improvement of the exhaust section of a gas turbine. Teploenergetika 11 no. 1:57-59 Ja '64.
(MIRA 17:5)

1. Khar'kovskiy politekhnicheskiy institut im. V.I.Lenina.

SEDACH, V.S., kand.tekhn.nauk; PUSTOVALOV, V.N., inzh.; SHCHEKALKIN, V.M., inzh.

Expenditure coefficients of the dosing outlets of the steam cooling channel of the SKR 100 turbine. Energomashinostroenie. 11 no.2:37-39 F '65. (MIRA 18:4) [illegible], M.P. (Vinnitsa)

Rehabilitation treatment of the disabled with forearm injuries and his placement in agricultural industry. Sov. med. 27 no.3:92-93 Mr '64. (MIRA 17:11)



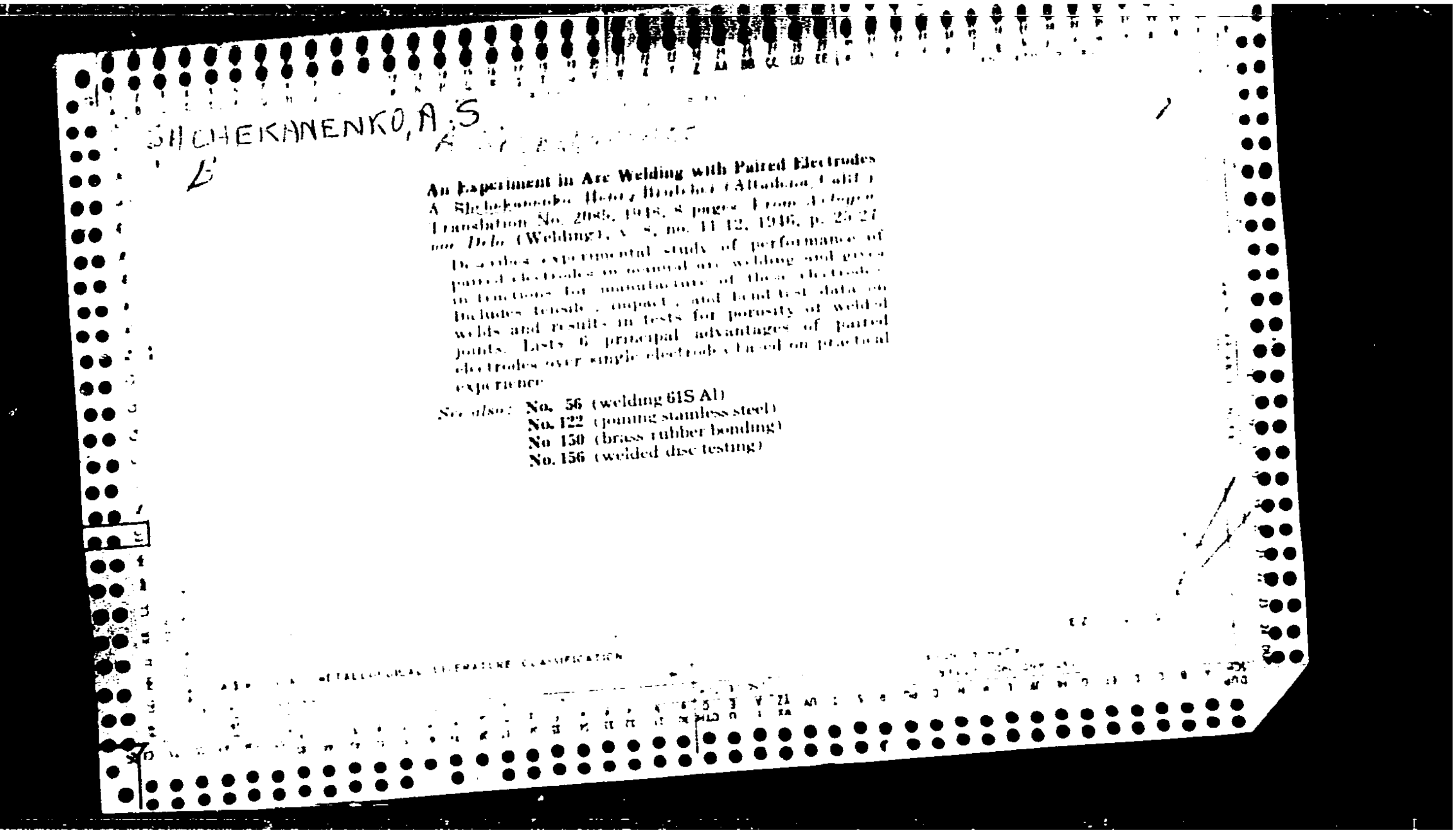
SHCHEKANENKO, A.S.

K

22-385. OXY-ACETYLENE PRESSURE WELDING. A. S. Shchekanenko, A. L. Zilberberg, and Ia. N. Kogan. *Avtogennoe Delo* (*Welding*), no. 3, 1947, p. 23-26. (In Russian.)

Construction of apparatus for the process; the preparation of the ends of pipe for welding; the welding of the pipe, and control apparatus.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



SHCHEKANENKO, A.S.

B

An Experiment in Arc Welding with Paired Electrodes. A. Shchekanenko. Henry Brutcher (Altadena, Calif.) Translation No. 2085, 1948, 8 pages. From *Avtogennoe Delo* (Welding), v. 8, no. 11-12, 1946, p. 25-27.

Describes experimental study of performance of paired electrodes in manual arc welding and gives instructions for manufacture of these electrodes. Includes tensile, impact, and bend test data on welds and results in tests for porosity of welded joints. Lists 6 principal advantages of paired electrodes over single electrodes based on practical experience.

See also: **No. 56** (welding 61S Al)
No. 122 (joining stainless steel)
No. 150 (brass rubber bonding)
No. 156 (welded disc testing)

METALLURGICAL LITERATURE CLASSIFICATION

AGEYEV, D.N., inzh.; SHCHEKANENKO, R.A., inzh.; ZABOTIN, Yu.N., tekhn.

Effect of the composition of keramzit concrete on its strength and deformations. Bet. i zhel.-bet. 9 no.2:83-88 F '63.

(MIRA [illegible])

(Keramzit) (Concrete--Testing)

SHCHEKATURINA, [redacted] L. G.

5

15 4E2c

Chem

2545. **The determination of free silica (quartz) in rocks and mine dusts.** L. G. Shchekaturina, V. P. Kondratova and V. I. Petrashen'. *Tr. Novocherkas. Politekhn. Inst.*, 1955, 31, 79–85; *Ref. Zhur., Khim.*, 1956, Abstr. No. 58,456.—On checking the determination of free SiO_2 (quartz) as H_2SiF_6, as proposed by Gurvits and Podgaits [*Zavod. Lab.*, 1948, (8), 935], high results were obtained. The method proposed by Danil'chenko and Repa [*Steklo i Keramika*, 1950, (8), 10] for the determination of free SiO_2 in glass as H_2SiF_6 was used with some modification for the determination of free SiO_2 (quartz) in rocks. Satisfactory results were obtained on testing the method with synthetic mixtures.

G. Brewer

BARICHEV, Ye.A.; BUROVA, N.N.; GOLODKOVSKAYA, G.A.; DOBRUSKINA, I.A.;
KAGNER, M.N.; KONOPLEVA, V.I.; KRASILOVA, N.S.; LEONOV, G.P.;
MURZAYEVA, V.E.; PODRABINEK, R.A.; PRYAKHIN, A.I.; RYZHOV,
B.V.; SERGEYEV, Ye.M.; FEDOROV, T.O.; FIDELLI, I.F.; EPSHTEYN,
G.M.[deceased]; SHCHEKHURA, I.I., red.; GEORGIYEVA, G.I., tekhn.
red.

[Geology and engineering geology of the upper Amur Valley]Geologicheskoe stroenie i inzhenerno-geologicheskaia kharakteristika doliny Verkhnego Amura. Moskva, Izd-vo Mosk. univ., 1962. 317 p. (MIRA 16:3)
(Amur Valley--Geology)
(Amur Valley--Engineering geology)

SHCHEKATUROV, N.

Our pride and honor. Sov. profsoiuzy 19 no.14:6-7 Jl '63.
(MIRA 16:9)

1. Predsedatel' zavodskogo komiteta Mytishchinskogo mashinostroitel'nogo zavoda, Moskovskaya obl.
(Mytishchi--Machinery industry workers--Education and training)
(Trade unions)

SHCHEKIN, Aleksandr Abramovich; MILYUTIN, N.A., retsenzent; GUSEVA, M.G., retsenzent; LYAKHOVSKAYA, Ye.A., retsenzent; SOSULINA, V.N., redaktor; EL'KINA, E.M., tekhnicheskiy redaktor.

[Making lace on the multishuttle lace machine] Proizvodstvo kruzhev na mnogochelnochnoi kruzhevnoi mashine. Moskva, Gos. nauchno-tekhn. izd-vo Ministerstva promyshlennykh tovarov shirokogo potrebleniia SSSR, 1954. 287 p. (MLRA 8:2)
(Lace and lacemaking)

SHCHEKIN, A.A., inzhener.

Ways of reducing waste in lace and tulle curtain production. Leg. prom. 14 no.10:38-41 O '54. (MLRA 7:11)
(Textile fabrics)

SHCHEKIN, A.A.

Increasing the productivity of a weft knitting machine. Tekst.prom.
16 no.3:58-59 Mr '56. (MLRA 9:6)

1.Glavnyy inzhener gardinno-tyulevoy fabriki imeni Samoylovoy.
(Knitting machines)

SHCHEKIN, A.A.

Operating three UV-2 weft knitting machines. Leg. prom. 16 no.8: 51-52 Ag '56. (MIRA 10:12)

1. Glavnyy inzhener fabriki im. Samoylovoy.
(Knitting machines)

ACCESSION NR: AP4040740 S/0050/64/000/006/0049/0051

AUTHOR: Shchekin, A. Ye.

TITLE: Calibration of radiosondes at temperatures of minus 100C

SOURCE: Meteorologiya i gidrologiya, no. 6, 1964, 49-51

TOPIC TAGS: meteorological instrument, radiosonde thermometer, air temperature sensor, heat sensor calibration, atmospheric temperature sensor, radiosonde heat sensor, low temperature sensor

ABSTRACT: Since radiosondes calibrated by the dry ice method at -75C are not adequate for measuring air temperature in the upper troposphere, and in the stratosphere in the equatorial and Arctic zones, the Laboratoriya poverki priborov (Instrument Calibration Laboratory) of the Tsentral'naya aerologicheskaya observatoriya (Central Aerological Observatory) has developed a device for cooling alcohol and toluene to -95 or -100C, for use in calibrating standard thermometers and, subsequently, radiosondes. The sensors are submerged in a toluene bath surrounded by a mixture of CO_2 and alcohol which, at atmospheric pressure, has a temperature of -70 to -75C. By adding more

Card 1/3

ACCESSION NR: AP4040740

SUBMITTED: 00

ATD PRESS: 3074

ENCL: 00

SUB CODE: EC, ES

NO REF SOV: 003

OTHER: 001

SHCHEKIN, B.V.

Nesting colony of the Amur red-footed falcon in the forest steppe of Transbaikalia. Ornitologiia no.7:153-156 '65.

(MIRA 18:10)

SHCHEKIN, R.V.

Biology of saker falcon in the forest steppe of Transbaikalia.
Ornitologiia no.7:497-498 '65. (MIRA 18:10)

SOV/111-58-11-11/36

AUTHORS: Shchëkin, G.A., Senior Engineer of the Laboratory; Pavlov, A.V., Laboratory Engineer

TITLE: A Two-Way Device for Short Lines (Dupleksnyy pribor dlya korotkikh liniy)

PERIODICAL: Vestnik svyazi, 1958, Nr 11, pp 12-13 (USSR)

ABSTRACT: The article contains a brief description of a two-way device which was developed by the laboratory of the Leningrad Central Telegraph Office. It is designed for establishing two-way communication on lines of not more than 300 km length in cases where telegraph traffic on this line exceeds the capacity of one telegraph apparatus. The device is assembled of standard parts and may be manufactured by the technical personnel of any oblast' telegraph office.
There are 4 diagrams and 1 table.

ASSOCIATION: Leningradskiy tsentral'nyy telegraf (Leningrad Central Telegraph Office)

Card 1/1

SHCHEKIN, G.A.; PAVLOV, A.V., inzh.; DRUKKER, Ye.M.; GERKULESOV, A.D.;
SHALASHOV, F.V.; LIVSHIT, Ye.A., inzh.

Operation of telegraph communications without control apparatus.
Vest. sviazi 18 no.7:22-25 Jl '58. (MIRA 11:9)

1.Nachal'nik laboratorii Leningradskogo tsentral'nogo telegrafa (for Shchekin). 2.Laboratoriya Leningradskogo tsentral'nogo telegrafa (for Pavlov). 3.Nachal'nik sluzhby magistral'nykh svyazey Leningradskogo tsentral'nogo telegrafa (for Drukker). 4.Pomoshchnik nachal'nika smeny Leningradskogo tsentral'nogo telegrafa (for Gerkulesov). 5.Glavnyy inzh. Kiyevskogo tsentral'nogo telegrafa (for Shalashov). 6.Laboratoriya Kiyevskogo tsentral'nogo telegrafa (for Livshit).
(Telegraph)

SHCHEKIN, G.A.; PAVLOV, A.V., inzh. laboratorii

Duplex apparatus for short lines. Vest.sviazi 18 no.11:12-13 N '58. (MIRA 11:12)

1. Starshiy inzhener laboratorii Leningradskogo tsentral'nogo telegrafa (for Shchekin).

(Telegraph--Duplex system)

6(7) SOV/111-59-10-14/23

AUTHOR: Saboch, G.P., Chief Engineer, and ~~Shenekin,~~ G.A., Chief

TITLE: Operation of Telegraph Communications Without a Transmission Control Text

PERIODICAL: Vestnik svyazi, 1959, Nr 10, pp 23-24 (USSR)

ABSTRACT: This article deals with several aspects of the system of telegraph transmission without the use of a printed control text in use at the Leningrad Telegraph Office where the system was developed in 1957; the system, state the authors, was approved at conferences of workers of telegraph enterprises of the Russian Federation, and recommended for introduction by the ministries of communications of the RSFSR and USSR. Prerequisites for the changeover to this system, as well as the changeover itself are discussed. It is stated that experience has shown that the absence of the printed control text not only does not lower the quality of telegram processing work, but even make it easier for the telegraphist to attend to the quality of incoming telegrams; at the same time use of this method makes it possible to cut expenses for opera-

Card 1/3

SOV/111-59-10-14/23

Operation of Telegraph Communications Without a Transmission Control Text

tional technical service and maintenance, as well as release up to 40% of telegraph apparatus for use in developing the telegraph network or replacement of obsolete types of equipment. Conversion to this system at the Leningrad Telegraph Office state the authors, was done gradually, and on the basis of experience gained from early experimental conversions detailed technical and operational instructions (outlined) were worked out; in this connection reference is made to a previous article (Vestnik svyazi, 1958, Nr 7). Training of telegraphists at the office was also organized. It is stated that checks have shown that there is no substantial difference in the quality of telegrams processed through systems using a control text and those without the control text. Measures taken to raise the quality of telegraph transmission work are discussed; as a result of these measures, it is reported, quality is steadily improving. In conclusion the authors note the inadequacy of the present method of con-

Card 2/3

SOV/111-59-10-14/23

Operation of Telegraph Communications Without a Transmission Control Text

ducting quality checks, and the need to replace it. There is 1 photograph.

ASSOCIATION: Leningradskiy telegraf (Leningrad Telegraph Office)(G.P. Suboch); Proizvodstvennaya laboratoriya (Production Laboratory)(G.A. Shchekin)

Card 3/3

SHCHEKIN, G.A., inzh.; SHTEYNBOK, M.M., inzh.

Lengthening the period of trouble-free service of relays in voice-frequency carrier telegraphy systems. Vest.sviazi 20 no.2:7-9 F '60. (MIRA 13:5)

1. Laboratoriya Leningradskogo telegrafa.
(Electric relays) (Telegraph, Wireless)

PEVZNER, O.B., kand.tekhn.nauk; BEL'MAN, M.Kh., inzh.; SHCHEKIN, G.A.;
FISHEL'ZON, I.V., inzh.

Increase in the life of regulator contactors of the electric motors of telegraph apparatus. Vest. sviazi 22 no.10:14-15 O '62.
(MIRA 15:11)

(Electric contactors) (Teletype)

L 17325-63 EWT(m)/BDS AFFTC/ASD/AFWL AR

ACCESSION NR: AP3004904 S/0120/63/000/004/0124/0127

55

AUTHOR: Arsayev, M. I.; Sulimova, N. Ye.; Shchekin, K. I.

TITLE: Sensitivity of multiplier phototubes to X-rays and gamma rays 19

SOURCE: Pribory*i tekhnika eksperimenta, no. 4, 1963, 124-127

TOPIC TAGS: multiplier phototube, phototube, X-rays, gamma rays, multiplier-phototube sensitivity

ABSTRACT: The effect of dose rate and energy of X-rays and gamma rays on the anode current of FEU-13, -29, -35, -16, -12, -38 multiplier phototubes was experimentally investigated. All photomultipliers exhibited maximum energy sensitivity to 35-45-kev radiation. Relative efficiency was within ±25% for 100-1,250-kev energies. Dose-rate sensitivity was found to be linear up to 30 r/hr for all of the above types of photomultipliers. Further flattening of sensitivity curves was found possible through the use of appropriate filters. Orig. art. has:

Card 1/2

L 17325-63

ACCESSION NR: AP3004904

0

5 figures, 2 formulas, and 2 tables.

ASSOCIATION: none

SUBMITTED: 28Sep62 DATE ACQ: 28Aug63 ENCL: 00

SUB CODE: GE NO REF SOV: 003 OTHER: 002

Card 2/2

L 41820-65 EWG(j)/EWT(l)/EWP(e)/EWT(m)/EPF(c)/EWP(i)/EPR/EWP(j)/T/EWP(b)
Pc-4/Pr-4/Ps-4 IJP(c) JD/WW/RM/WH

ACCESSION NR: AP5010910 UR/0286/65/000/007/0101/0101

AUTHOR: Garapov, E. F.; Lebedeva, M. F.; Shchekin, K. I. 47

B

TITLE: Material for ionization chambers 19 for x-ray dosimetry. Class 39, No. 169776 15

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1965, 101

TOPIC TAGS: dosimetry, graphited polyethylene, 15 polyethylene filler, ionization chamber

ABSTRACT: This Author Certificate deals with improved material for ionization chambers for x-ray dosimetry. The material consists of 45—50% polyethylene 15 and 50—55% graphite. 15 [VS]

ASSOCIATION: Gosudarstvennyy komitet po aviatsionnoy tekhnike SSSR (State Committee on Aviation Technology, SSSR)

SUBMITTED: 18Feb63 ENCL: 00 SUB CODE: MT, NP

NO REF SOV: 000 OTHER: 000 ATD PRESS: 3235

Card 1/1

SOV/130-59-1-6/21

AUTHORS: Prokhorenko K.K., Shchekin, N.P. and Sergiyenko S.M.

TITLE: Influence of some Technological Factors on the Quality of Structural Steel (Vliyaniye nekotorykh tekhnologicheskikh faktorov na kachestvo konstruktsionnoy stali)

PERIODICAL: Metallurg, 1959, Nr 1, pp 11-14 (USSR)

ABSTRACT: At the Kulebaki metallurgical works objects (rail tyres and gear blanks) made of types 30 KhN3A and 35 KhGSA and other steels are frequently defective because of longitudinal surface cracks and blowholes both under the surface and in deeper layers of the ingots and non-metallic inclusions. The steels are melted in oil-fired (air atomization) basic open hearth furnaces with careful exclusion of moisture from the charge, cast into two ladles through a bifurcated runner and bottom poured into big-end-up, twelve-sided 2.5 tonne moulds with hot tops. The authors describe a special investigation at the works, in which works-made firebrick hollow-ware was used, to find ways of eliminating the flaws. It was found that increasing the quantity of aluminium in deoxidation failed by itself to prevent blowholes and increasing deoxidation time led to a higher incidence of these flaws (Figs 1 and 2 show

Card 1/4

Influence of some Technological Factors on the Quality of Structural Steel

affect the incidence of large non-metallic inclusions appearing in machining of blanks and tyres. Increasing mould filling speed was found to increase the incidence of longitudinal hot cracks (Table 3), which occurred mostly along corners. The use of a rounded ingot mould shape (Fig 3b) reduced this and higher filling speeds became possible (Table 4), but for complete elimination top-pouring through a tundish was necessary, and this increased the incidence of transverse cracks. It was found that pre-tapping metal temperatures in the furnace of 1620-1630°C (measured with platinum/platinum-rhodium immersion couples) corresponded to minimal longitudinal cracking in 30KhN3A steel. Surface tears during forging

SOV/130-59-1-6/21

Influence of some Technological Factors on the Quality of Structural Steel

were closely linked with longitudinal cracks and were reduced by the same measures and also by slowing down the cooling of ingots by this steel.

There are 3 figures and 5 tables.

Card 4/4

[illegible], [illegible]

Technology

Spravochnik po sanitarnoi tekhnike v grazhdanskom stroitel'stve (Manual of Sanitary engineering in residential construction). Pod obshchei red. Lobaeva, Kiev, Gostekhizdat, 1951. 356 p.

[illegible] MONTHLY LIST OF RUSSIAN ACCESSIONS, Library of Congress, November 1952. Uncl.

SHCHEKIN, R. V.

SHCHEKIN, R. V.: "Pumpless automatic feed of low-output steam boilers for heating installations". Kiev, 1954. Min Higher Education USSR. Kiev Construction Engineering Inst, Chair of Heat Supply and Ventilation. (Dissertations for the Degree of Candidate of Technical Sciences.)

So: Knizhnaya letopis' No. 49, 3 December 1955. Moscow.

GRACHEV, A.V., dotsent; KORENEVSKIY, S.M., inzh.; SAMGIN, A.N., inzh.; SHCHEKIN, R.V., inzh.; LOBAYEV, B.N., prof., doktor tekhn.nauk, obshchiy red.; PECHKOVSKAYA, O., vedushchiy red.; VUYEK, M., tekhn.red.

[Heating and ventilation of apartment houses of few stories] Teplosnabzhenie i ventiliatsiia maloetazhnykh zhilykh zdanii. Pod red. B.N.Lobaeva. Kiev, Gos.izd-vo tekhn.lit-ry USSR, 1954. 238 p. (MIRA 12:3)

1. Deystvitel'nyy chlen Akademii arkhitektury USSR (for Lobayev).
(Heating) (Ventilation)

SHCHEKIN, Rostislav Vladimirovich, dotsent, kand.tekhn.nauk; KORENEVSKIY, Sergey Mikhaylovich, dotsent, kand.tekhn.nauk; BEM, Georgiy Yevgen'yevich, dotsent; TSYGANENKO, Gleb Nikolayevich, inzh.; ARTYUSHENKO, Mikhail Alipiyevich, inzh.; LOBAYEV, B.N., prof., doktor tekhn.nauk, red.; POLTORATSKAYA, E., red.; NOSINENKO, A., tekhn.red.

[Reference book on heating and ventilation in residential and public-building construction] Spravochnik po teplosnabzheniiu i ventiliatsii v grazhdanskom stroitel'stve. Kiev, Gos.izd-vo lit-ry po stroit. i arkhit.USSR, 1959. 846 p. (MIRA 13:4)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury USSR (for Lobayev).
(Ventilation) (Heating)

SHCHEKIN, Rostislav Vladimirovich; BEM, Georgiy Yevgen'yevich;
POLTORATSKAYA, E., red.; ADAMCHUK, A.A., tekhn.red.

[Hot-water heating] Vodianoe otoplenie. Kiev, Gos.izd-vo
lit-ry po stroit. i arkhit. USSR, 1960. 106 p.
(MIRA 13:12)

(Hot-water heating)

SHCHEKIN, Rostislav Vladimirovich, kand. tekhn. nauk, dots.; KORENEVSKIY, Sergey Mikhaylovich, kand. tekhn. nauk, dots.; BEM, Georgiy Yevgen'yevich, dots.; ARTYUSHENKO, Mikhail Alipiyevich, inzh.; SKOROKHOD'KO, Fedor Isidorovich, dots.; LOBAYEV, B.N., doktor tekhn. nauk, prof., red.; POLTORATSKAYA, E.A., red.; SURYGINA, E.N., red.; VOLOSHCHENKO, Z.N., red.; LEUSHCHENKO, N.L., tekhn.red.

[Handbook on heating and ventilation in residential and public buildings]Spravochnik po teplosnabzheniiu i ventiliatsii v grazhdanskom stroitel'stve. [By] R.V.Shchekin i dr. 2. izd., perer. i dop. Kiev, Gos.izd-vo lit-ry po stroit. i arkhit. USSR, 1962. 1019 p. (MIRA 16:2)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury Ukr. SSR (for Lobayev).

(Heating) (Ventilation)

TADZHIMURATOV, A.T., kand.ekonom.nauk; SHCHEKIN, S.S., red.; PAVLOV, A., tekhn.red.

[Economic and cultural development of the Kara-Kalpak A.S.S.R. during the Soviet regime; on the 40th anniversary of the Great October Revolution] Razvitie ekonomiki i kul'tury Kara-Kalpakskoi ASSR za gody Sovetskoi vlasti; k 40-letiiu Velikoi Oktiabr'skoi sotsialisticheskoi revoliutsii. Nukus, Karakalpakskoe gos.izd-vo, 1958. 99 p. (MIRA 13:4)
(Kara-Kalpak--Economic conditions)

SOV-107-58-8-29/53

AUTHOR: Shchekin, V.

TITLE: The Solar Battery (Solnechnaya batareya)

PERIODICAL: Radio, 1958, Nr 8, pp 29-30 (USSR)

ABSTRACT: One of the best materials for solar battery elements is silicon. If under the action of the sun's radiation an emf is induced across contiguous plates of p and n, silicon is equal to 0.5v. The maximum output capacity of silicon elements is 10-12 milliwatt/cm^2 of photosensitive surface area. The efficiency of present-day silicon elements is 11-13% compared to 1% with other materials. The maximum possible efficiency in theory is 22%. They can operate both in sunshine and in cloudy weather, although with a reduced output in the latter. If used in conjunction with a buffer battery which stores the energy produced by the element during the day, they can provide a round-the-clock electric supply. The "Sputnik" radio receiver is powered from a solar battery of 5 v and fitted with a miniature TsNK-0.4 storage battery. Solar batteries were fitted to the Third

Card 1/2

The Solar Battery SOV-107-58-8-29/53

Soviet Sputnik, the elements being placed on the surface of the satellite. Here they alternate with normal chemical batteries. The author calculates that to supply electricity for lighting a small flat or house at 110 v, 3 amp, a solar battery of only 2x2 m would be sufficient. There are 5 graphs and 1 diagram.

1. Batteries--Design 2. Batteries--Performance 3. Solar energy--Applications 4. Silicon--Photoconductivity

Card 2/2

SHCHEKIN, V., prof.

Geographical heterosis in animal husbandry and its characteristics. Nauka i zhizn' 30 no.6:31 Je '63. MIRA 16:7)

(Stock and stockbreeding)

[illegible], [illegible].

[illegible], [illegible]. A. – "[illegible]", [illegible]
[illegible], [illegible], [illegible], [illegible].

SO: [illegible], [illegible], (L[illegible], [illegible], [illegible]).

[illegible], [illegible]

[illegible]

Information changes in [illegible] and [illegible] improved care. Konevodstvo, 22, No. 2, 1952.

MONTHLY LIST OF RUSSIAN ACCESSIONS, LIBRARY OF CONGRESS, JUNE 1952. UNCLASSIFIED.

YUNUSOV, A.Yu.; SHCHEKIN, V.A.; KIYATKIN, P.F.

Scientific achievements in the physiology and and genetics of farm animals. Izv. AN Uz. SSR. Ser. biol. nauk no.4:57-66 '57. (MIRA 11:9)

(Uzbekistan--Soil research)

Q-1

USSR/Farm Animals. General Problems

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 49935

Author : Shchekin B.A.
Inst : Tashkent Farm Institute.
Title : Enlargement of Aboriginal Breeds by Improved Keeping.

Orig Pub : Tr. Tashkentsk. s.Okh. in-ta, 1957, vyp. 8, 105-108

Abstract : The analysis of experiences in breeding of Kasakh horses on Kustanayskiy plots, of donkeys on Tashkent stud farms, and of camels on Timurskiy camel farms proved that enlargement of farm animals becomes hereditary if, after their preceding generations were fed meagerly, the animals were then put on a better diet. Already in the first generation improved feeds and keeping conditions lead to attaining of larger progeny from parents raised on insufficient diets. If improved conditions are not modified further, second generation animals preserve on the average the well-grown size which was attained by their parents. In further raising of pure-bred animals, however, enlargement of following generations is

Card : 1/2

SHCHEKIN, V. A., BORISENKO, Ye. Ya., PUNG, A. I., VSYAKIKH, A. S.

"Important problems of selection in cattle-and-horse breeding."

reported at Conference on Problem of Heredity and Variability, held at
Institute of Genetics, AS USSR, 8-14 Oct 1957
Vestnik AN SSSR, 1958, Vol. 28, No. 1, pp. 127-129 (author Kushner, Kh. F.)

NASYROV, B.; SHCHEKIN, V.A., zasl. deyatel' nauki i tekhniki Uzbekskoy SSR, prof., spets. red.; BESSONOV, M.P., red.; BAKHTIYAROV, A., tekhn. red.

[Karakul sheep on state farms in Uzbekistan] Karakulevodstvo v sovkhozakh Uzbekistana. Tashkent, Gosizdat UzSSR, 1962. 133 p. (MIRA 16:5)

(Uzbekistan—Karakul sheep)

SHCHEKIN, V.A.; ABDURAZAKOV, A.U.; YERSHOVA, Ye.M., kand. sel'-khoz. nauk, otv. red.; FREYDENBERG, E.D., red.; GUBAYDULLIN, S., tekhn. red.

[Fundamentals of animal husbandry] Osnovy zhivotnovodstva; uchebnik dlia uchashchikhsia IX klassov srednei shkoly. Izd.2. Tashkent, Sredniaia i vysshaia shkola, 1963. 138 p. (MIRA 17:1)

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

9

e a

Application of active amalgamation to the analysis of gold-platinum slimes. V. V. Shchekin. *Sovet. Zolotoprom.* 1935, No. 10, 44-6.—A method has been worked out for the extn. of Pt and Au from concentrates by means of Zn amalgam contg. 20% Zn and 80% Hg, from an acid medium. The concentrate is ground to −0.5 mm. and slime made up in the ratio liquid:solid = 0.5:1 to 1:1. The slime is acidified to 0.5 *N* with H_2SO_4, HCl or $NaHSO_4$ and then agitated with the amalgam. HNO_3 should be avoided for it renders the Pt passive. A modified method was worked out in which Zn amalgam is substituted by Fe-filings amalgam. In this last method the acidity of the slime is made up to 2.0 *N*, and $CuSO_4$ (to make up 2-3% soln.) is added. The Fe amalgam is prepd. from soft Fe filings, heated to 500-600° to remove oil, then freed from oxide by treatment with acid. The filings are covered with a soln. of $CuSO_4$ and then with Hg. An extn. of 97-100% Pt and 100% Au is obtained by these methods.

S. L. Madorsky

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

[illegible]

"Production of Certain High Molecular Hydrocarbons," Zhur. Obshch. Khim., 13, Nos. 9-10, 1943. Mbr., Lab. Hydrogenesis, Inst. Mineral Fuels, Dept. Tech. Sci., Acad. Sci., -1941-.

1ST AND 2ND ORDERS
PROCESSES AND PROPERTIES INDEX
3RD AND 4TH ORDERS

Ca

1

Preparation of certain high-molecular hydrocarbons. V. A. Hetling and V. V. Shchekin. *J. Gen. Chem.* (U. S. S. R.) 13, 717-21(1943)(English summary).—The hydrogenate of sunflower oil, after sapon. and steam distn., gave a mixt. of aliphatic acids: stearic, oleic, isoöleic and palmitic. The mixt. (500 g.) was charged into an autoclave and, after addn. of 10% of Cu chromite catalyst, was hydrogenated at 350-60°, with an initial H pressure of 150 atm. The resulting hydrocarbons were thoroughly fractionated *in vacuo*, to yield a narrow fraction of *octadecane*, $b_{4.5}$ 150-61°, m. 27°, n_D^{30} 1.4369, d_4^{30} 0.7786 (50-52% yield). A higher-boiling fraction (b_{4-5} 161-90°) contained some octadecanol and stearic acid. Reduction of the same amt. of the initial acid mixt. at 325° with the reaction being stopped after 1.5-2 hrs. (instead of 6 hrs.) gave, upon fractionation, 70-80% of almost pure *octadecanol*, b_{15} 207-12°, m. 56-7°; on a 2nd distn. the pure alc. was obtained, b_{15} 209-10°. Especially active batches of Adkins catalyst enabled the authors to effect the reduction at 230-50°. The octadecanol was converted into *octadecyl iodide* by heating with iodine-red P or by heating with a current of dry HI; the product was converted into *octadecylbenzene* by the Fittig reaction, to give 60-65% crude product. Purified octadecylbenzene, after distn. over Na, b_{15} 249°, m. 35-6°, n_D^{40} 1.4751, d_4^{40} 0.8510; it dissolved completely in 3.5 vols. of 98-9% H_2SO_4 in 30 min. at room temp. Hydrogenated with Ni oxide at 140-160 atm. H pressure at 230-50°, it gave *octadecylcyclohexane*, $b_{3.5-4}$ 210-12°, m. 41°, n_D^{41} 1.4531, d_4^{41} 0.8178; the same compd. was readily prepd. from cyclohexyl iodide and octadecyl iodide by the Wurtz reaction with very close correspondence of phys. consts.

G. M. Kosolapoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

SHCHEKIN, V. V.

Chemical Abst.
Vol. 48 No. 8
Apr. 25, 1954
General and Physical Chemistry

The relation between molecular refraction and heat of combustion of organic compounds. V. V. Shchekin. *Trudy Inst. Nefti, Akad. Nauk S.S.S.R.* 1, No. 2, 295-9 (1950); cf. *C.A.* 45, 4540*a*.--For alkanes, Q/MR (heat of combustion/mol. refraction) is a const., but the relation does not hold for other compds. A corrected relation, $Q/MR_D' = 33.7$, is developed which is applicable to a wide variety of compds. $MR_D' =$ observed MR_D − a correction (based on bond refractivities given by Fajans and Knorr, *C.A.* 20, 1553). For alkanes and cycloalkanes, no correction is applied. For olefins, $MR_D' = MR_D - (MR_{C=C} - 2MR_{C-H}) = MR_D - 0.743$. For oxygenated compds., depending on bonds contained therein: $MR_D' = MR_D - (MR_{C=O} + MR_{O-OH} + MR_{O-O-C})$, where $MR_{C=O} = 3.42$; $MR_{O-OH} = 3.23$; $MR_{O-O-C} = 2.85$. Thus for ketones or aldehydes, $MR_D' = MR_D - 3.42$. Eight tables showing validity are given for alkanes, cycloalkanes, olefins, alcs., ketones, aldehydes, acids, and esters. Q can be estd., usually within 1%, by the expression: $Q = 33.7\ MR_D'$.

John A. Krynitsky

10/18/54

CA

2

Relation between the molar refractions and the heats of combustion of organic compounds. V. V. Shchekin and A. V. Frost (Moscow State Univ.). *Vestnik Moskov. Univ.* 5, No. 6, *Ser. Fiz.-Mat. i Estest. Nauk* No. 3, 43-6(1950).—The constancy of the ratio Q/R (heat of combustion/mol. refraction) = 33.7 applies also to several homologous series other than alkanes and cycloalkanes, if R is replaced by a corrected R' allowing for bonds other than C—C and C—H, with the aid of the bond refractions of Fajans and Knorr (*C.A.* 20, 1553). For the alkene series, the necessary correction $\Delta R = R - R'$ is (C=C) − 2 (C—H) = 0.743, for monoalcs. (C—O—H) = 3.25, for ketones and aldehydes (C=O) = 3.42, for acids (C=O) + (C—O—H) = 6.65, and for esters (C=O) + (C—O—C) = 6.27. N. Thon

70

CA

Methylcyclopentane from cyclohexanol. I. A. Musaev and V. V. Shchekin. *Doklady Akad. Nauk S.S.S.R.* **74**, 733-4(1950). Cracking of cyclohexanol on a Houdry-type aluminosilicate catalyst at 400°, 0.7 l./l. catalyst/hr., for 60 min., gave 78.6% hydrocarbons, 17.4% H_2O, and 4.0% gas, tar, and losses. Compn. of the hydrocarbons: fraction b. < 75°, 57.7%, b. > 75°, 42.3%; for the fraction b. 75°, beginning to b. 67°, n_D 1.4131, d 0.7518, unsatd. 19.9%. Very close results were obtained at 375° in 75 min. With cyclohexene as the initial reactant, at 340°, 1.2 l./l. catalyst/hr., 50 min., the yield of hydrocarbons was 94.5%; fraction b. < 75°, 57.1%, b. > 75°, 42.9%; in the lower-boiling fraction (68-75°), unsatd. 24.0%. Hydrogenation of the product from cyclohexanol on Pt on C at 120° gave pure methylcyclopentane; the yield with respect to cyclohexanol is approx. 45%, and with respect to cyclohexene, approx. 54%. This process is considerably cheaper than either the production of methylcyclopentane from adipic acid or by hydrogenation of C_6H_6 under pressure on MoS_2.

N. Thon

SHCHEKIN, V. V.

Reactions of 1-methylcyclopentene on an active aluminosilicate. A. A. Petrov and V. V. Shchekin (Inst. Nefti, Akad. Nauk S.S.S.R.). *Doklady Akad. Nauk S.S.S.R.* 78, 913-15(1951).—Passage of cyclohexene (I) and 1-methylcyclopentene (II) on Al silicate gave the following results (*temp.*, space velocity in l./l. catalyst/hr.; duration in min.; yield of monomer (%), polymer (%), coke (%); monomer fraction: b. temp., n^{20}_D, d^{20}_4, wt. % unsatd.; polymer fraction: b. temp., n^{20}_D, d^{20}_4, mol. wt., wt. % unsatd., % sulfonatable matter): (I) *250°*, 0.2, 100; 39, 28, 32; 72-3°, 1.4090, 0.7488, 0.8; 200-30°, 1.4870, 0.8854, —, 1.3, 32; *250°*, 0.6, 100; 44, 30, 16; 72-82°; 1.4265, —, 54; —, 1.4950, —, —, 27, 40; *316°*, 1.0, 50;

53, 43, 4; 71-85°, 1.4167, 0.7630, 22; 200-40°, 1.5137, —,
166, 21, 68; (II) *250°*, 0.2, 100; 35, 31, 24; 71-3°, 1.4082
0.7476, 0.7; 200-40°, 1.4805, 0.8720, 155, 7.3, 31; *250°*
0.6, 100; 40, 40, 17; 72-5°, 1.4155, —, 29; —, 1.5015, —
—, 20, 45; *316°*, 1.0, 50; 50, 41, 6; 71-5°, 1.4117, —
14; 200-40°, 1.5137, —, 166, 21, 68. The conversions of
and II are very similar, but in II the extent of polymeriza
tion, coking, and redistribution of H is greater than in I,
i.e., II is converted more deeply than I. Hydrogenatio
(on Pt at 100°) of the monomer fraction of II, gives no 6-
membered rings, i.e. there is no ring expansion. The
monomer fraction of I, at 250 and 316°, contains, resp., 96
and 75% II, i.e. isomerization of I to II is much easier than
its satn. By combustion analysis, the polymer fractions
of I and II contain aromatic compds. The residues, after re-
moval of the aromatics and the small amt. of unsatd. material,
has the compn. $C_{12}H_{22}$, and, by its dehydrogenation on Pt
(to $C_{12}H_{16}$) is identified as the bicyclic cyclohexylmethyl-
cyclopentane; it cannot be dimethylbicyclopentyl on ac-
count of the ease of dehydration, and it cannot be bi-
cyclohexyl because of the absence of Ph_2 in the dehydrogena-
tion product. The absence of 6-membered rings in the light
fraction of II indicates that, in simple pentamethylenes,
expansion of the ring can take place only simultaneously
with dimerization. It appears that, on the Al silicate cat-
alyst, dehydrogenation to a C_6H_6 ring also can take place
only simultaneously with dimerization. It is noteworthy
that dimerization seems to be obligatorily accompanied by
isomerization of one of the rings.

N. Thon

SHCHEKIN, V. V.

2 C

√ **The dehydration of *n*-octanols over active aluminum silicate.** V. V. Shchekin. *Trudy Inst. Nefti, Akad. Nauk S.S.S.R.* ~~1, No. 2, 33-4~~(1952).—1-Octanol and 2-octanol have been dehydrated to the octenes over Al silicate (Houdry type cracking catalyst) or platinized Al silicate (10% platinum) without accompanying polymerization or H redistribution. Ten hour heating of 350 g. of 1-octanol (b.p. 194°, n_D^{20} 1.4288, d_{20} 0.8275) with 40 g. of catalyst at 197–207° in a flask with reflux condenser gave 335 g. liquid product. The hydrocarbon product was unsatd., b. 121.5–122°, n_D^{20} 1.4114, and on hydrogenation gave *n*-octane, b. 125°, n_D^{20} 1.3974, d_{20} 0.7037. 2-Octanol, b. 178°, n_D^{20} 1.4258, d_{20} 0.8159, in the vapor phase was passed over either catalyst at 210°, vol. velocity 0.3 ml. alc./ml. catalyst per hr. An 87% yield of unsatd. hydrocarbons (95–96% unsat.) resulted. Passage of a mixt. of *n*-octenes over the catalyst under the same conditions gave back the starting material in 90–94% yield. 1-Octanol or 2-octanol gave a quant. yield of *n*-octane when passed over the platinized catalyst in a stream of H.

Joseph B. Levy

BI

USSR/Chemistry - Aromatization, Liquid Fuels

Jul 52

"The Transformation of Cyclohexene Over Active Aluminosilicate," V. V. Shchekin

PA 243 T8

"Trudy Inst Nefti" Vol 2, pp 34-38

During the transformation of cycloxene over an aluminosilicate catalyst izomerization, polymerization, hydrogenation of olefins, and aromatization of polymers take place; that methylcyclopentane, methylcyclopentenes, cyclohexane, methylcyclohexylcyclopentane, and methylphenylcyclopentane are formed; that compds of the dicyclohexyl, dicyclopentyl, and condensed ring hydrocarbon type are absent in the reaction products; that aromatization of the products which have formed is one of the sources of hydrogen for the formation of saturated products.

243T8

243T8

SHCHEKIN, V. V.

[illegible], V. V., OROCHKO, D. I., AND FROST , A. V.

The Effect of Nitrogen and Oxygen Compounds on the Cracking Process with Aluminum Silicate Catalyst
Trudy VNIGI, No 6, 1954, pp 105-113

Selected some typical oxygen- and nitrogen-containing compounds and investigated their effect on the cracking process. The presence of pyridine bases and quinoline sharply reduces the total rate of conversion and gasoline yield, but increases the amount of coke formation. The presence of phenols had little effect on the cracking process except to increase the amount of coke formation on the catalyst. (RZhKhim, No 21, 1954)

SO: Sum. No. 639, 2 Sep 55

SHCHEKIN - V.V

Kinetics of decomposition of cyclohexene in dependence on catalyst structure. B. K. Mankash and V. V. Shchekin. *Izvest. Akad. Nauk S.S.S.R., Otdel. Khim.* [redacted] 1119-22; cf. Wheeler, *C.A.* 45, 8337*b*.—Cyclohexene was passed at 316° over aluminosilicate catalysts of the same compn. but having different surface structures (surface availability). The reaction rate can be used as a measure of the catalyst activity in this case by using the diffusion barrier const. k_s, given by $h = (L/r^{0.5})(k_s/D_k)^{0.5}$, where h is a nondimensional parameter characteristic of the degree of diffusion hindrance, L is length of pores in the catalyst, r is their radius, and D_k is the Knudsen diffusion coeff. The reaction rate const. does not directly depend on the catalyst surface. G. M. Kosolapoff

Shchekin, V.V.

MOLCHANOVA, S. I.; MOROZOVA, O.Ye.; SHCHEKIN, V.V.

Catalytic cracking with magnesium silicate catalysts. Trudy Inst. nefti no.6:30-34 '55. (MLRA 8:12)

(Cracking process)

Shchekin, V. V.

3000

Catalytic cracking of heavy petroleum fractions. O. E. Morozova and V. V. Shchekin. *Trudy Inst. Nefti, Akad. Nauk S.S.S.R.* 4, 80-9(1950).—Cracking of heavy products on com. alumina-silica catalysts does not differ fundamentally, except for high coke yield, from cracking of light products of the same origin. Gases obtained in cracking light and heavy products are almost alike, but the gasoline from heavy products contains more aromatic hydrocarbons. High temps. and high space velocity reduce the coke yield but produce gasolines contg. more unsatd. hydrocarbons.

B. Z. Kamich

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LFH

SHCHEKIN, V.

FROST, Andrey Vladimirovich, professor; DOLGOPOLOV, N.N., sostavitel'; TOPCHIYEVA, K.V., doktor khimicheskikh nauk, otvetstvennyy redaktor; GERASIMOV, Ya.I., redaktor; KOROBOV, V.V., kandidat khimicheskikh nauk, redaktor; SMIRNOVA, I.V., kandidat khimicheskikh nauk, redaktor; TETEVSKIY, V.M., doktor khimicheskikh nauk, redaktor; TILICHEYEV, M.D. doktor tekhnicheskikh nauk, redaktor; SHCHEKIN, V.V., redaktor izdatel'stva; ZELENKOVA, Ye.V., tekhnicheskiy redaktor

[Papers on kinetics and catalysis] Trudy po kinetike i katalizu. Moskva, Izd-vo Akademii nauk SSSR, 1956. 538 p. (MLRA 9:7)

1. Chlen-korrespondent AN SSSR (for Gerasimov)
(Catalysis) (Hydrocarbons) (Chemical reaction)

TOPCHIYEV, A.V., akademik, otvetstvennyy redaktor; KAZANSKIY, B.A., akademik, zamestitel' otvetstvennogo redaktora; OFITSEROV, V.V., redaktor; KRENTSEL', B.A., kandidat tekhnicheskikh nauk, redaktor; KURASHEV, M.V., kandidat tekhnicheskikh nauk, redaktor; KARAPETYAN, Sh.A., redaktor izdatel'stva; SHCHEKIN, V.V., redaktor izdatel'stva; MAKUNI, Ye.V., tekhnicheskiy redaktor

[Chemical processing of petroleum hydrocarbons; proceedings of a conference] Khimicheskaia pererabotka neftianykh uglevodorodov; trudy soveshchaniia. Moskva, Izd-vo Akademii nauk SSSR, 1956. 654 p. (MLRA 9:12)

1. Vsesoyuznoye soveshchaniye po kompleksnoy khimicheskoy pererabotke neftyanykh gazov.
(Petroleum--Refining) (Hydrocarbons)

15-57-12-17323

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 12, p 94 (USSR)

AUTHORS: Shchekin, V. V., Morozova, O. Ye., Antonova, A. I.

TITLE: Evaluating the Uniformity and Size of Active Surface of Alumosilicates (Ob otsenke odnorodnosti i velichiny aktivnoy poverkhnosti u alyumosilikatov)

PERIODICAL: Tr. In-t nefti AN SSSR, 1956, Nr 8, pp 100-106

ABSTRACT: The authors prepose a method for evaluating the uniformity and size of active surfaces of alumosilicate catalysts. This method is based on utilizing kinetic relations observed on the deactivated catalysts. The authors point out that strong organic bases, while deactivating the surfaces of alumosilicates, also lower their activity in regard to isomerization, polymerization, cracking and redistribution of hydrogen; these facts indicate that active centers for all these reactions act similarly. Amounts of organic bases necessary for a full deactivation of a catalyst were

Card 1/2

15-57-12-17323

Evaluating the Uniformity and Size of Active (Cont.)

determined by means of the kinetic equation for catalytic reactions of three catalysts. These amounts lie between the limits of 6 to 7 gram molecules of pyridine per 100 g of a catalyst. The value of 5.6 gram molecules was found by direct measuring of chemical absorption of pyridine. Surface activity of the studied alumosilicates was proved to be practically uniform. This last fact expresses itself in the applicability of A. V. Frost's equation for appropriate calculations in the stability of β parameter and in the linear decrease of α in response to the quantity of deactivator used.

Card 2/2

I. D. Borneman

- SHCHEKIN, V. V.

B-9

Category USSR

Abs Jour Zh--Kh, No 3, 1957, 7589

Author Shchekin, V. V., Molchanova, S. I., and Antonova, A. I

Inst Petroleum Institute of the Academy of Sciences USSR

Title On Changes in the Activity and Selectivity of Aluminosilicate Catalysts

Orig Pub Tr. In-ta Nefti AN SSSR, 1956, Vol 8, 107-113

Abstract The activity of synthetic aluminasilicate catalysts (K) is reduced less by carbonization in the redistribution of hydrogen in cyclohexane (1) than in the isomerisation of cyclohexane (2). Preliminary poisoning of K with pyridine or quinoline reduces the pentamethylenes yield to a greater extent than the carbonisation of K. Decreasing the pore size of K has a more beneficial effect in the case of reaction (1) than in the case of reaction (2). It has been

Card 1/2

Category: USSR B-9

Abs Jour. Zh--Kh, No 3, 1957, 7589

noted that the change in selectivity caused by the carbonisation of K may be caused by external diffusive complications or by the preferential closing of small pores. The authors recommend the utilisation of K with large pores for the attainment of optimal isomerisation product yields. A method is described for the determination of six- and five-membered cycloalkanes and cycloalkenes in the reaction mixture.

Card 2/2

SHCHEKIN, V. V.

B-9

Category: USSR

Abs Jour: Zh--Kh No 3, 1957, 7590

Author : Mankasi, Ye. K., Moichanova, S. I., and Shchekin, V. V.
Inst : Petroleum Institute of the Academy of Sciences USSR
Title : Investigation of the Aging of Silicate Catalysts During Heating and Treatment with Vapors by the Adsorption Method

Orig Pub: Tr. In-ta Nefti AN SSSR, 1956, Vol 8, 120-130

Abstract: The changes in surface structure, porosity, and activity of alumina-silicate and magnesium-silicate catalysts prepared by different methods after heating to and vapor treatment at 750° has been investigated. A marked decrease in specific surface area S and pore volume, and an increase in the average pore radius, as well as a decrease in the activity of the catalysts, were observed during the cracking of fuel oil at 450°. After heating

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ROZOVSKIY, A.Ya.; SHCHEKIN, V.V.

Kinetics of the first order heterogenic catalytic reactions conducted in stream with a uniform surface area. Trudy inst. nefti. 10:275-285 '57. (MIRA 11:4)

(Gases) (Chemical reaction, Rate of)
(Catalysis)

SHCHEKIN, V.V.

5(3); 11(4) PHASE I BOOK EXPLOITATION SOV/2021

Akademiya nauk SSSR. Institut nefti

Trudy, t. 12 (Transactions of the Petroleum Institute, USSR. Academy of Sciences, Vol 12) Moscow, Izd-vo AN SSSR, 1958. 395 p. Errata slip inserted. 1,700 copies printed.

Ed.: S. R. Sergiyenko, Professor; Ed. of Publishing House: K. G. Miyesserov; Tech. Ed.: V. V. Golubeva.

PURPOSE: The book is intended for scientists, engineers, and technicians in the petroleum industry.

COVERAGE: This collection of articles describes the results of studies on the chemistry and technology of petroleum and gas conducted in the laboratories of the Petroleum Institute, Academy of Sciences, USSR, in 1956 and 1957. A new section "Petrochemical Synthesis and Technology of Petroleum" has been included in the collection of articles. A list of investigations published by the associates of the Institute in 1956 and 1957 and a list of dissertations for the Doctor's and Candidate's degrees presented in 1956 and 1957 at open sessions of the Academic Council of the Petroleum Institute, Academy of Sciences, USSR, are given.

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Kryukov, Yu. B., V. K. Butyugin, L. G. Liberov, N. A. Stepanova, and A. N. Bashkirov. Synthesis of Butyl Alcohol Containing the Radioactive Carbon Isotope, C^{14} 299

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SHCHEKIN, V.V.

Nature of active centers and mechanism of catalytic action of hydrogenation catalysts. Trudy Inst.nefti 13:161-166 '59. (MIRA 13:12)

(Catalysis) (Hydrogenation)

FROST, Andrey Vladimirovich, prof. [deceased]. Prinimali uchastiye:
BUSHMAKIN, I.N.; VVEDENSKIY, A.A.; GRYAZNOV, V.M.; DEMENT'YEVA,
M.I.: DINTSES, A.I.; DOBRONRAVOV, R.K.; ZHARKOVA, V.R.; ZHERKO,
A.V.; IPAT'YEV, V.N.; KVYATKOVSKIY, D.A.; KOROBOV, V.V.; MOOR,
V.G.; NEMTSOV, M.S.; RAKOVSKIY, A.V.; REMIZ, Ye.K.; RUDKOVSKIY,
D.M.; RYSAKOV, M.V.; SEREBRYAKOVA, Ye.K.; STEPUKHOVICH, A.D.;
STRIGALEVA, N.V.; TATEVSKIY, V.M.; TILICHEYEV, M.D.; TRIFEL',
A.G.: FROST, O.I.; SHILYAYEVA, L.V.; SHCHEKIN, V.V.. DOLGOPOLOV,
N.N., sostavitel'; GERASIMOV, Ya.I., otv.red.; SMIRNOVA, I.V.; red.;
TOPCHIYEVA, K.V.; YASTREBOV, V.V., red.; KONDRASHKOVA, S.F., red.
izd-va; LAZAREVA, L.V., tekhn.red.

[Selected scientific works] Izbrannye nauchnye trudy. Moskva,
Izd-vo Mosk.univ., 1960. 512 p. (MIRA 13:5)

1. Chlen-korrespondent AN SSSR (for Gerasimov).
(Chemistry, Physical and theoretical)

S/195/60/001/003/012/013
B002/B058

AUTHORS: Rozovskiy, A. Ya., Shchekin, V. V., Pokrovskaya, Ye. G.

TITLE: Effect of the Internal Diffusion Inhibition on the Kinetics of the Ethylene Hydrogenation Reaction

PERIODICAL: Kinetika i kataliz, 1960, Vol. 1, No. 3, pp. 464-470

TEXT: This paper was read at the Vsesoyuznaya konferentsiya po organicheskomu katalizu (All-Union Conference of Organic Catalysis) held in Moscow on November 18, 1959. Three samples of a nickel-aluminum catalyst of various grain size were used for the study; F. V. Korenevskaya determined the properties by measuring the adsorption. The kinetics of the ethylene hydrogenation on these catalysts was studied between 80 and 140°C. The hydrogenation proceeds as first-order reaction, apart from the inhibition by the reaction products; the apparent activation energy was calculated for all three catalysts as 4.1 kcal/mole. A strong diffusion inhibition takes place thereby; the reaction proceeds in the range of internal diffusion. The activation energy amounted to 8.2 kcal/mole for the kinetic range of the reaction. A comparison between experimental and calculated values shows

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Effect of the Internal Diffusion Inhibition on the Kinetics of the Ethylene Hydrogenation Reaction

S/195/60/001/003/012/013
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that the inhibition through internal diffusion can be well represented by the previously given equation (Ref. 1): $\alpha = v_o \ln \frac{1}{1-y} - \beta . v_o y$, α being $\frac{\sqrt{K_h r D'_K S_g}}{L\sqrt{2}(1+n+\delta)} = \frac{K_h S_g f}{1+n+\delta}$, $\beta = \frac{n - 1/4 B}{1 + n + \delta}$; v_o the specific rate of addition in mole/g.sec; y rate of reaction; K_h observed rate constant of the heterogeneous catalytic reaction of first order in mole/cm^2.sec; r mean radius of pores in cm; D'_K diffusion coefficient in mole/cm.sec; S_g specific catalyst surface in cm^2/g; L distance between catalyst grain surface and the center in cm; n change of the molar number through the reaction; δ degree of dilution; B the parameter determining the order of reaction in the kinetic range; f factor of internal diffusion inhibition. R. D. Obolentsev and A. V. Mashkina are mentioned. There are 4 figures, 5 tables, and 8 references:

LANDAU, M.A.; SHCHEKIN, V.V.

Difference in the mechanisms of dehydrogenation on oxides and on metals. Izv.AN SSSR Otd.khim.nauk no.5:946-947 My '60. (MIRA 13:6)

1. Institut neftekhimicheskogo sinteza Akademii nauk SSSR.
(Dehydrogenation) (Catalysts)

ROZOVSKIY, A.Ya.; SHCHEKIN, V.V.

Kinetics of heterogeneous catalytic reactions of the first order, inhibited by reaction products and by internal diffusion. Kin.i kat. 1 no.2:313-323 Jl-Ag '60. (MIRA 13:8)

1. Institut neftekhimicheskogo sinteza AN SSSR.
(Chemical reaction, Rate of)
(Catalysis)

LANDAU, M.A.; SHCHEKIN, V.V.

Chemical correspondence principle in heterogeneous catalysis.
Trudy Inst. nefti 14:118-126 '60. (MIRA 14:5)
(Catalysis)

S/081/61/000/021/011/094
B102/B138

AUTHORS: Landau, M. A., Shchekin, V. V.

TITLE: The multiplet theory of catalysis and the principle of microscopic reversibility

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1961, 49, abstract 21B391 (Tr. In-ta nefti. AN SSSR, v. 14, 1960, 127 - 135)

TEXT: The multiplet theory asserts that chemical bonds are broken where the atoms are attracted by different active points of a catalyst, and are formed between atoms attracted to the one active point. The authors maintain that this is contrary to the principle of microscopic reversibility which requires the refutation of this assertion. This is in no way contradictory to the principle affirmation of the structural part of multiplet theory, which states that multi-point adsorption of the reacting molecules must take place on the surface of the catalyst if catalytic reaction is to be accomplished. The usual doublet schemes should therefore be maintained, since there is greater possibility of the presence of a doublet on the catalytic surface than of a quadruplet. The multiplet

Card 1/2

LANDAU, M.A.; SHCHEKIN, V.V.

Reactions of six-membered cyclic hydrocarbons and the multiplet theory of catalysis. Trudy Inst. nefti 14:136-149 '60. (MIRA 14:5)

(Catalysis)
(Hydrocarbons)

KATSOBASHVILI, Ya.R.; BRUN-TSEKHOVOY, A.R.; SHCHEKIN, V.V.; SLADKOVSKAYA, I.R.

Microspherical nickel-alumina catalysts for the conversion of natural gas flown through. Kin.i kat. 2 no.4:567-573 Jl-Ag '61. (MIRA 14:10)

1. Institut neftekhimicheskogo sinteza AN SSSR.
(Gas, Natural) (Catalysis)

S/081/61/000/021/012/094
B102/B138

AUTHORS: Landau, M. A., Shchekin, V. V.

TITLE: Multiplet theory of catalysis. The principle of energetic correspondence

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1961, 49, abstract 21B392 (Tr. In-ta nefti. AN SSSR, v. 14, 1960, 150 - 159)

TEXT: The authors discuss the fundamentals of the multiplet theory of catalysis and point out some of its deficiencies. The principle of energetic correspondence only takes account of the quantitative energy relations, and not the qualitative chemical nature of the bonds formed between atoms reacting in the chemical transformation and those of the catalyst. The authors feel that this has serious inconsistencies and does not explain the experimentally observed and theoretically proven increase in the rate of heterogeneous catalytic reaction when activation energy is raised. [Abstracter's note: Complete translation.]

Card 1/1

KRENTSEL', B.A.; SIDOROVA, L.G.; SHISHKINA, M.V.; KUSAKOV, M.M.; KORENEVSKAYA, F.V.; SHCHEKIN, V.V.

Conversion polymerization of α-olefins. Neftekhimiia 2 no.5: 705-708 S-O '62. (MIRA 16:1)

1. Institut neftekhimicheskogo sinteza AN SSSR.
(Olefins) (Polymerization)

ROZENBERG, L.M.; MSHAKOVA, I.B.; SHCHEKIN, V.V.; GENEKH, I.S.

Chromatographic separation of n-alkanes from petroleum fractions on activated carbon. Neftekhimiia 3 no.4:472-481 Jl-Ag '63. (MIRA 16:11)

1. Institut neftekhimicheskogo sinteza AN SSSR imeni A.V. Topchieva.

GLAVATI, O.L.; POLAK, L.S.; SHCHEKIN, V.V.

Radiation-induced and stereospecific polymerization of acrylonitrile and acrylic acid in montmorillonite inclusion compounds. Neftekhimiia 3 no.6:905-910 N-D '63. (MIRA 17:3)

1. Institut neftekhimicheskogo sinteza AN SSSR im. A.V.Topchiyeva.